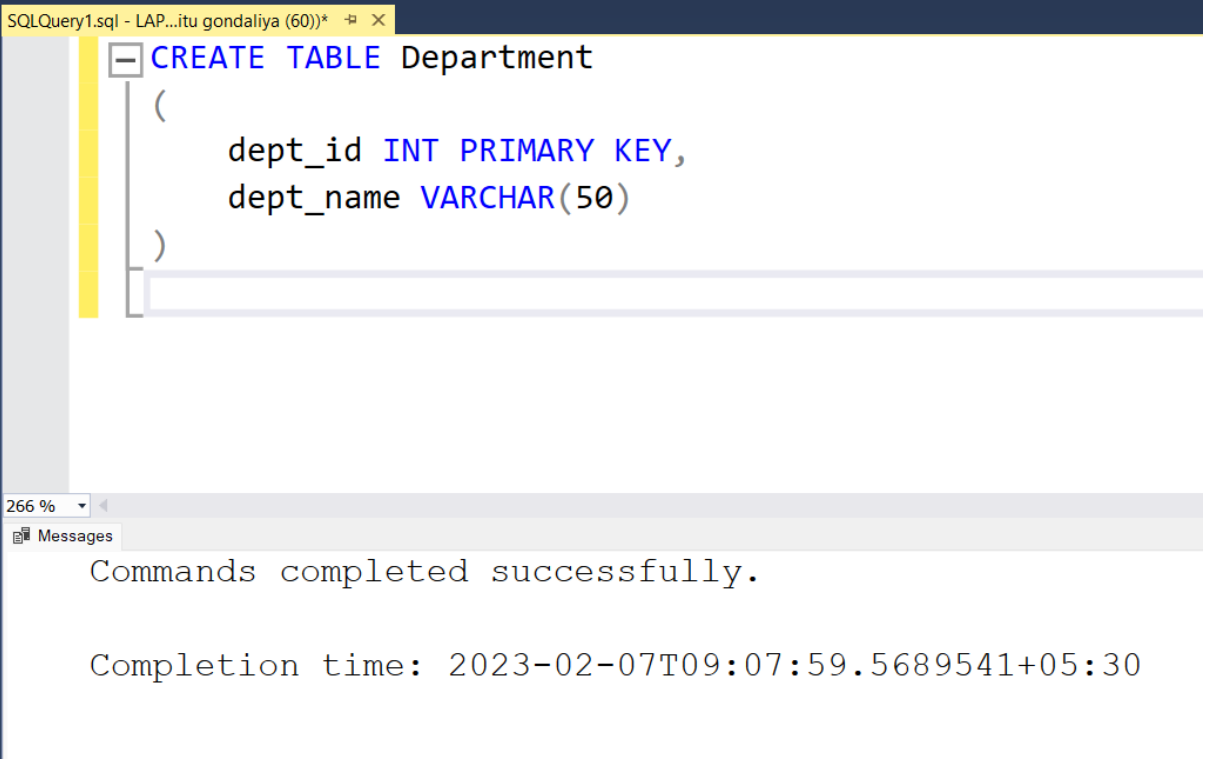


Assignment 3

```
1.CREATE TABLE Department
(
    dept_id INT PRIMARY KEY,
    dept_name VARCHAR(30)
)
```



The screenshot shows a SQL query editor window with a dark blue title bar. The query text is: `CREATE TABLE Department (dept_id INT PRIMARY KEY, dept_name VARCHAR(50))`. The editor has a yellow vertical bar on the left and a light blue horizontal bar at the bottom. Below the query text, there is a status bar showing '266 %' and a 'Messages' tab. The Messages tab is active, displaying the text: 'Commands completed successfully.' and 'Completion time: 2023-02-07T09:07:59.5689541+05:30'.

```
SQLQuery1.sql - LAP...itu gondaliya (60))* - X
```

```
CREATE TABLE Department
(
    dept_id INT PRIMARY KEY,
    dept_name VARCHAR(50)
)
```

266 %

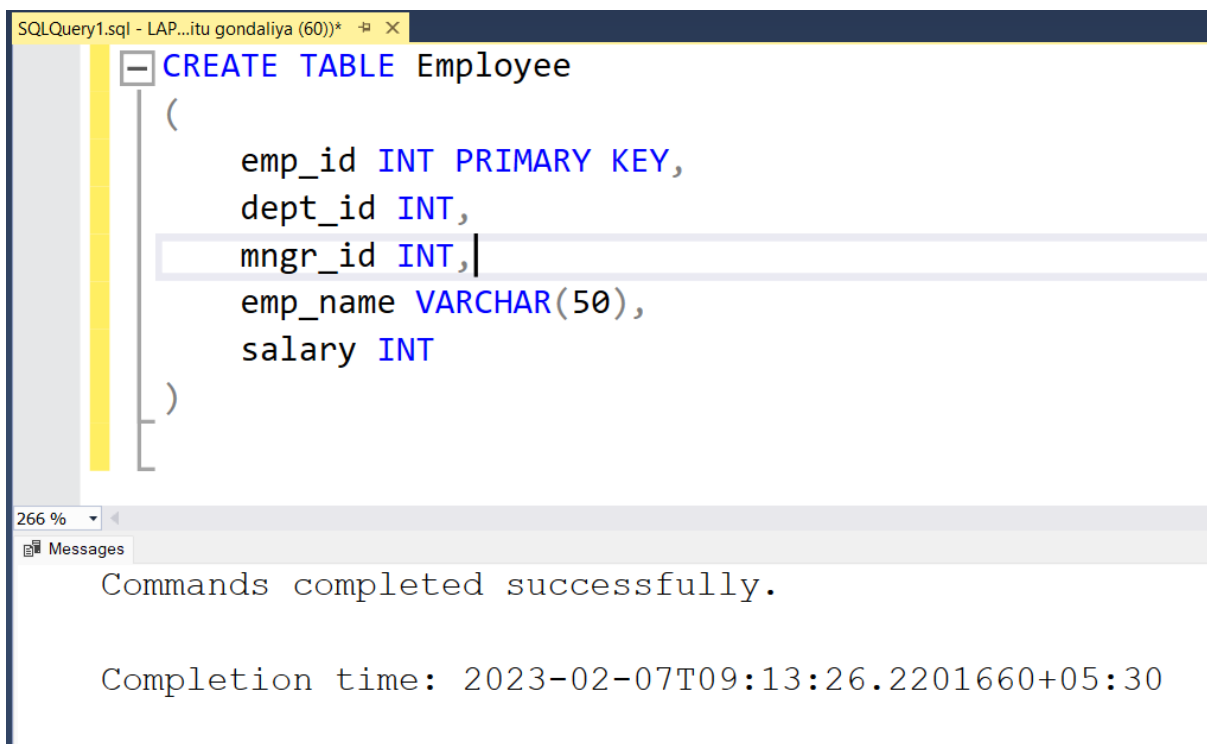
Messages

Commands completed successfully.

Completion time: 2023-02-07T09:07:59.5689541+05:30

2.CREATE TABLE Employee

```
(  
    emp_id INT PRIMARY KEY,  
    dept_id INT,  
    mngr_id INT,  
    emp_name VARCHAR(50),  
    salary INT  
)
```



The screenshot shows a SQL query editor window titled "SQLQuery1.sql - LAP...itu gondaliya (60))". The query text is: `CREATE TABLE Employee`
`(`
 `emp_id INT PRIMARY KEY,`
 `dept_id INT,`
 `mngr_id INT,`
 `emp_name VARCHAR(50),`
 `salary INT`
`)`. The editor has a yellow vertical bar on the left and a zoom level of 266%. Below the editor, a "Messages" pane displays the text: "Commands completed successfully." and "Completion time: 2023-02-07T09:13:26.2201660+05:30".

```
SQLQuery1.sql - LAP...itu gondaliya (60))  
CREATE TABLE Employee  
(  
    emp_id INT PRIMARY KEY,  
    dept_id INT,  
    mngr_id INT,  
    emp_name VARCHAR(50),  
    salary INT  
)  
266 %  
Messages  
Commands completed successfully.  
Completion time: 2023-02-07T09:13:26.2201660+05:30
```

```
INSERT INTO Department
VALUES (1,'Java'),
      (2,'python'),
      (3,'dotnet'),
      (4,'react')
```

The screenshot shows a SQL IDE window titled "SQLQuery1.sql - LAP...itu gondaliya (60))*". The query editor contains the following SQL statement:

```
INSERT INTO Department
VALUES (1, 'Java'),
      (2, 'python'),
      (3, 'dotnet'),
      (4, 'react')
```

Below the query editor, the "Messages" tab is active, displaying the execution results:

(4 rows affected)

Completion time: 2023-02-07T09:18:23.4667580+05:30

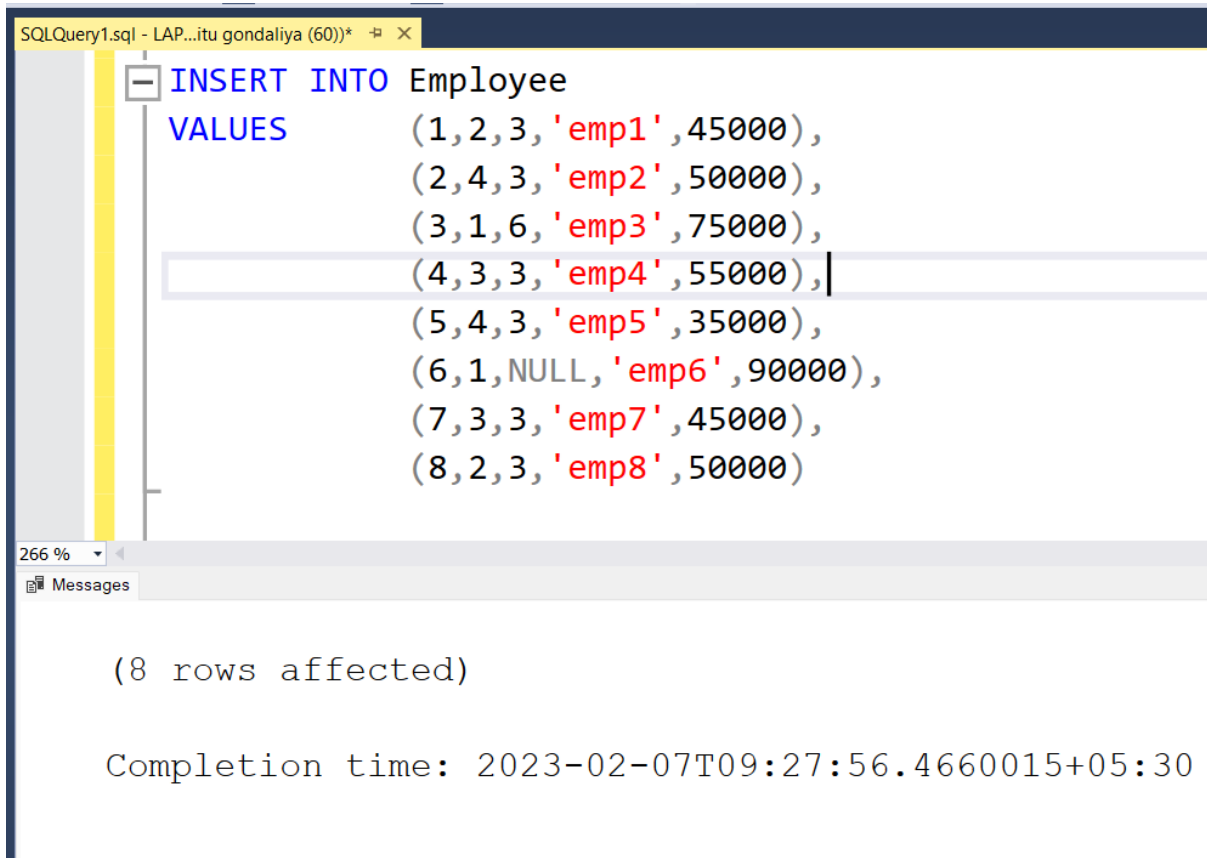
The screenshot shows a SQL IDE window with two tabs: "SQLQuery3.sql - LAP...itu gondaliya (77))*" and "SQLQuery2.sql - LAP...itu gondaliya (76))*". The "SQLQuery3.sql" tab is active, showing the following SQL statement:

```
SELECT * FROM Department
```

Below the query editor, the "Results" tab is active, displaying the query results in a table:

	dept_id	dept_name
1	1	Java
2	2	python
3	3	dotnet
4	4	react

```
INSERT INTO Employee
VALUES (1,2,3,'emp1',45000),
      (2,4,3,'emp2',50000),
      (3,1,6,'emp3',75000),
      (4,3,3,'emp4',55000),
      (5,4,3,'emp5',35000),
      (6,1,NULL,'emp6',90000),
      (7,3,3,'emp7',45000),
      (8,2,3,'emp8',50000)
```



The screenshot shows a SQL query editor window titled "SQLQuery1.sql - LAP...itu gondaliya (60))". The query is an INSERT statement into the "Employee" table. The query text is as follows:

```
INSERT INTO Employee
VALUES (1,2,3,'emp1',45000),
      (2,4,3,'emp2',50000),
      (3,1,6,'emp3',75000),
      (4,3,3,'emp4',55000),
      (5,4,3,'emp5',35000),
      (6,1,NULL,'emp6',90000),
      (7,3,3,'emp7',45000),
      (8,2,3,'emp8',50000)
```

The query is executed, and the results are displayed in the "Messages" pane at the bottom. The results show that 8 rows were affected, and the completion time is 2023-02-07T09:27:56.4660015+05:30.

(8 rows affected)

Completion time: 2023-02-07T09:27:56.4660015+05:30

```
SELECT * FROM Employee
```

266 %

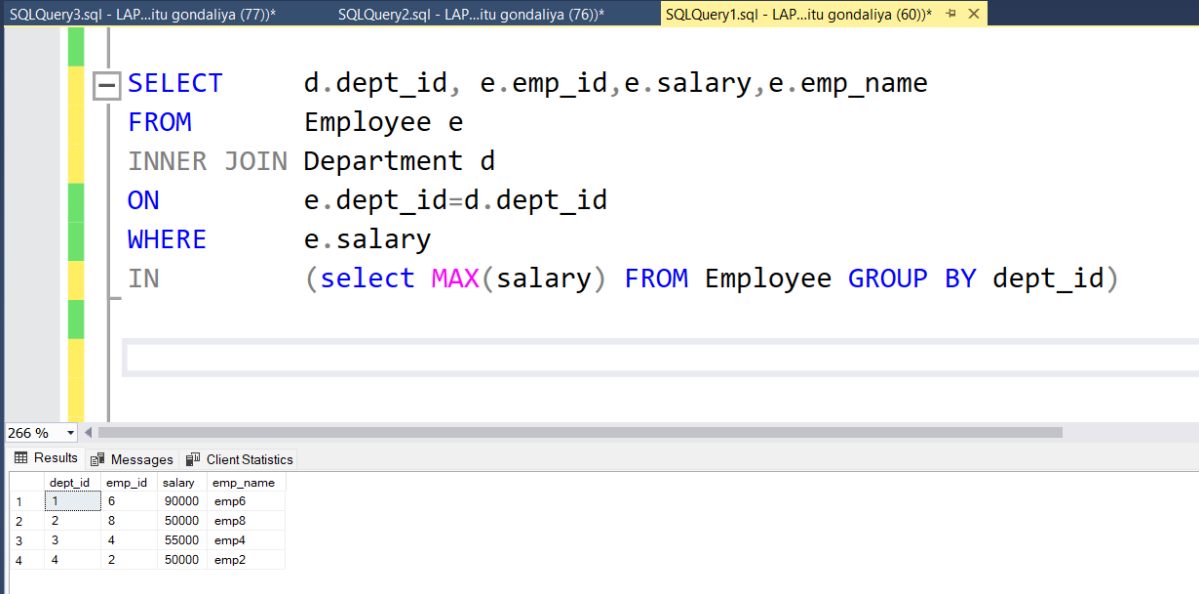
Results Messages

	emp_id	dept_id	mngr_id	emp_name	salary
1	1	2	3	emp1	45000
2	2	4	3	emp2	50000
3	3	1	6	emp3	75000
4	4	3	3	emp4	55000
5	5	4	3	emp5	35000
6	6	1	NULL	emp6	90000
7	7	3	3	emp7	45000
8	8	2	3	emp8	50000

Query 1 :

write a SQL query to find Employees who have the biggest salary in their Department

```
SELECT d.dept_id, e.emp_id,e.salary,e.emp_name
FROM Employee e
INNER JOIN Department d
ON e.dept_id=d.dept_id
WHERE e.salary
IN (select MAX(salary) FROM Employee GROUP BY dept_id)
```



The screenshot shows a SQL IDE with three tabs at the top: 'SQLQuery3.sql - LAP...itu gondaliya (77))*', 'SQLQuery2.sql - LAP...itu gondaliya (76))*', and 'SQLQuery1.sql - LAP...itu gondaliya (60))*'. The active tab is 'SQLQuery1.sql'. The query editor displays the following SQL query:

```
SELECT d.dept_id, e.emp_id,e.salary,e.emp_name
FROM Employee e
INNER JOIN Department d
ON e.dept_id=d.dept_id
WHERE e.salary
IN (select MAX(salary) FROM Employee GROUP BY dept_id)
```

Below the query editor, the 'Results' tab is selected, showing a table with 4 rows and 4 columns: dept_id, emp_id, salary, and emp_name. The data is as follows:

	dept_id	emp_id	salary	emp_name
1	1	6	90000	emp6
2	2	8	50000	emp8
3	3	4	55000	emp4
4	4	2	50000	emp2

Query 2 :

write a SQL query to find Departments that have less than 3 people in it

```
SELECT d.dept_name, COUNT(*) AS [No. of Employee],dept_name
FROM Department d
INNER JOIN Employee e
ON e.dept_id=d.dept_id
GROUP BY dept_name
HAVING COUNT(e.emp_id)<3
```

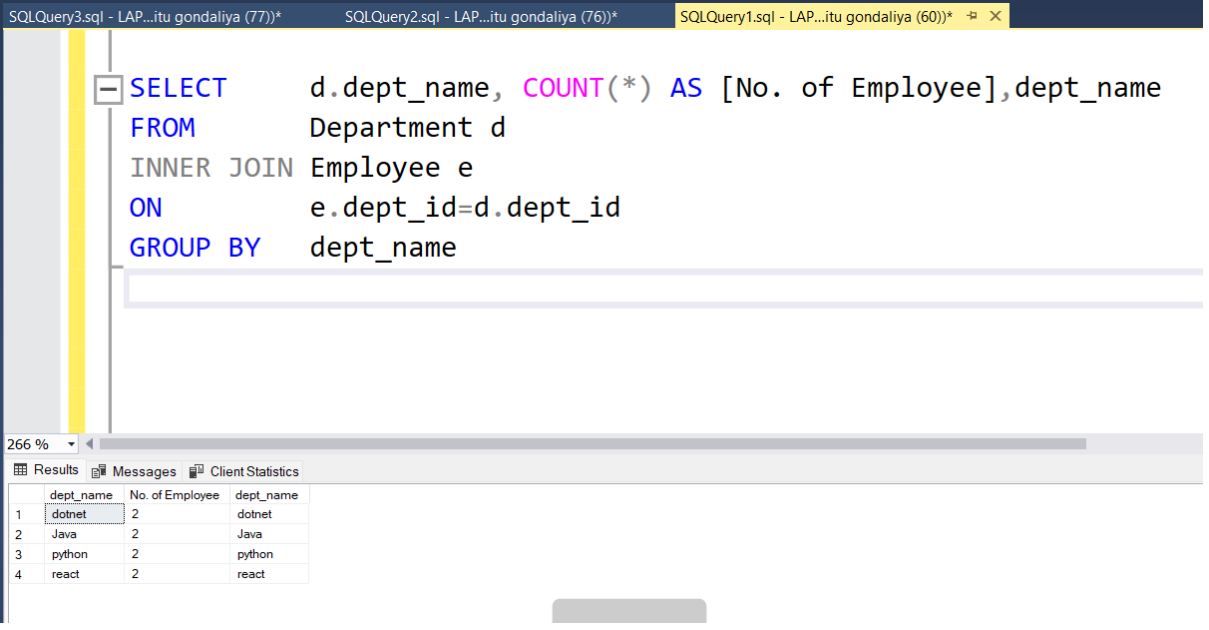
The screenshot shows the SQL Developer interface. The top pane displays the SQL query: `SELECT d.dept_name, COUNT(*) AS [No. of Employee],dept_name FROM Department d INNER JOIN Employee e ON e.dept_id=d.dept_id GROUP BY dept_name HAVING COUNT(e.emp_id)<3`. The bottom pane shows the 'Results' tab with a table containing 4 rows and 3 columns: dept_name, No. of Employee, and dept_name. The data rows are: 1 dotnet 2 dotnet, 2 Java 2 Java, 3 python 2 python, and 4 react 2 react.

	dept_name	No. of Employee	dept_name
1	dotnet	2	dotnet
2	Java	2	Java
3	python	2	python
4	react	2	react

Query 3 :

write a SQL query to find All Department along with the number of people there

```
SELECT d.dept_name, COUNT(*) AS [No. of Employee],dept_name
FROM Department d
INNER JOIN Employee e
ON e.dept_id=d.dept_id
GROUP BY dept_name
```



The screenshot shows a SQL IDE with three tabs: 'SQLQuery3.sql - LAP...itu gondaliya (77))*', 'SQLQuery2.sql - LAP...itu gondaliya (76))*', and 'SQLQuery1.sql - LAP...itu gondaliya (60))*'. The active tab 'SQLQuery3.sql' contains the following SQL query:

```
SELECT d.dept_name, COUNT(*) AS [No. of Employee],dept_name
FROM Department d
INNER JOIN Employee e
ON e.dept_id=d.dept_id
GROUP BY dept_name
```

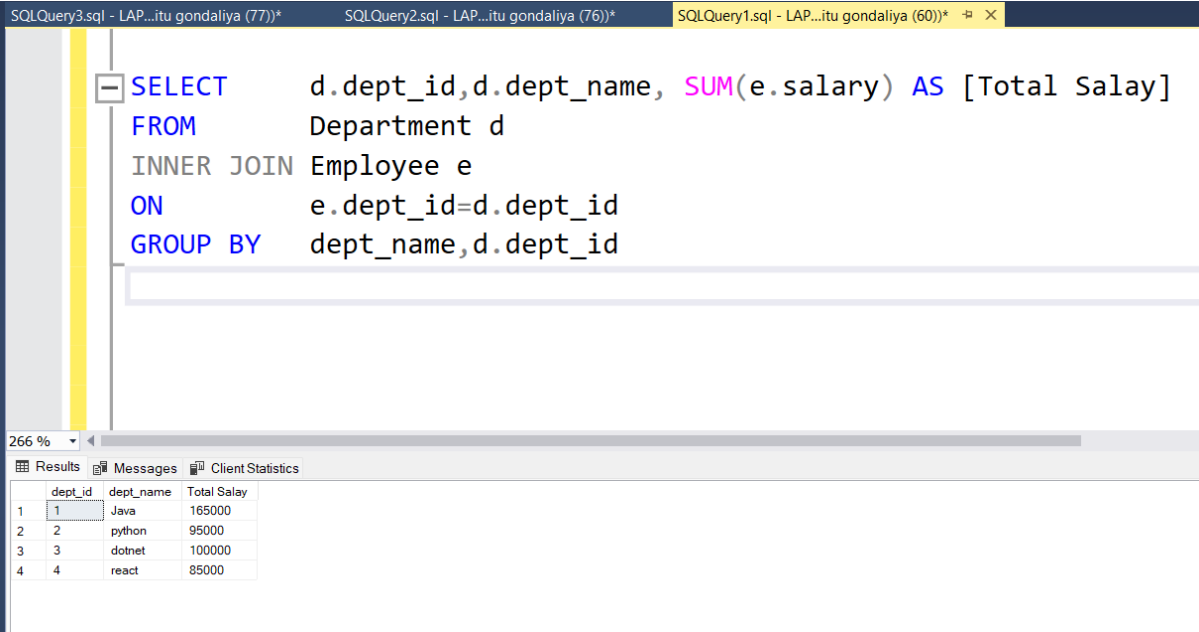
Below the query editor, the 'Results' pane shows the output of the query. It displays a table with three columns: 'dept_name', 'No. of Employee', and 'dept_name'. The results are as follows:

	dept_name	No. of Employee	dept_name
1	dotnet	2	dotnet
2	Java	2	Java
3	python	2	python
4	react	2	react

Query 4 :

write a SQL query to find All Department along with the total salary there

```
SELECT d.dept_id,d.dept_name, SUM(e.salary) AS [Total Salay]
FROM Department d
INNER JOIN Employee e
ON e.dept_id=d.dept_id
GROUP BY dept_name,d.dept_id
```



The screenshot shows a SQL Server Enterprise Manager interface. At the top, there are three tabs: 'SQLQuery3.sql - LAP...itu gondaliya (77))', 'SQLQuery2.sql - LAP...itu gondaliya (76))', and 'SQLQuery1.sql - LAP...itu gondaliya (60))'. The active tab is 'SQLQuery1.sql'. Below the tabs, the SQL query is displayed in a text editor. The query is:
`SELECT d.dept_id,d.dept_name, SUM(e.salary) AS [Total Salay]`
`FROM Department d`
`INNER JOIN Employee e`
`ON e.dept_id=d.dept_id`
`GROUP BY dept_name,d.dept_id`
Below the query editor, there is a 'Results' pane showing the output of the query. The results are displayed in a table with three columns: 'dept_id', 'dept_name', and 'Total Salay'. The table contains four rows of data. The first row is highlighted with a blue background. The zoom level is set to 266%.

dept_id	dept_name	Total Salay
1	Java	165000
2	python	95000
3	dotnet	100000
4	react	85000

